REMARKS

Reconsideration and allowance of the subject application are respectfully requested.

Claims 1-7 are pending in this application. Claims 8, 9 and 10 have been cancelled. Claims 1-7 have been amended. The subject matter of claim 10 has been essentially incorporated into claim 1 and claims have accordingly been cancelled. Additionally, in claims 1-7, the term "an organic compound" revised to "a β –lactam," and the term "several" appearing in claim 1 has been rewritten to "two or more," for improved clarity. No new matter has been added.

The applicants respectfully traverse the rejection of claims 1-2, 6-7 and 10 under 35 USC 102(b) in view of NOF Corp., JP 1995-301882A (JP '882). The cited reference does not anticipate the presently claimed invention or make it obvious.

A copy of JP 5-301882A and an English translation of JP 5-301882A is attached to this Amendment along with PTO Form 1449 listing same. Official entry and consideration of these documents are requested along with the return of the PTO Form 1449 with the Examiner's initials in accordance with MPEP 609.

JP '882 discloses a method for powderizing water-soluble phospholipid such as, glycerophosphatidyl choline, glycerophosphatidyl ethanolamine, and others. The claims, have been amended as shown above, to replace the term "an organic compound" with the term "a β –lactam compound." JP '882 does not disclose or suggest any reference to a β –lactam compound.

Accordingly, the applicants submit that the presently claimed invention is not only allowable under Section 102(b) in view of JP '882, but the claimed invention is allowable under Section 103(a) in view of JP '882.

The applicants respectfully traverse the rejection of claims 1-10 under 35 USC 103(a) in view of JP 1995-301882A taken with Iwata et al. The cited references do not make the presently claimed invention to be obvious.

The teachings of JP '882 were discussed above and the presently claimed invention shown to significantly distinguish over JP '882. The teachings of Iwata et al. do not remedy the deficiencies of JP '882.

Please refer to claim 1 of JP '882, which reads as follows:

Claim 1

"A powderization method for a water-soluble phospholipid comprising the following steps (1) and (2):

(1) dissolving a water-soluble phospholipid in an alcohol having 1 to 4 carbon atoms, then adding a non-polar solvent mutually soluble with the alcohol, and executing an azeotropic dehydration to reduce the water content of the water-soluble phospholipid to 3 wt% or less; and

(2) dissolving the water-soluble phospholipid obtained in the step (1) in an alcohol having 1 to 4 carbon atoms in an amount of 1 to 5 times by weight, then adding a non-polar solvent in an amount of 10 to 30 times by weight of the water-soluble phospholipid, and causing crystallization at a temperature of 0 to 30°C, so as to obtain a water-soluble phospholipid in powder form."

The method described in JP '882 relates to a method for powderizing a water-soluble phospholipid by crystallizing the water-soluble phospholipid after lowering the water content thereof to 3% by weight or less. The reference describes that the invention is to provide a powderization method, capable of solving the problems in the conventional technologies and of producing a powder of water-soluble phospholipids, being suitable as a raw material of cosmetics, pharmaceuticals and the like, by a simple operation (in paragraph [0005]). Further, JP '882 discloses that

a certain type of water-soluble phospholipid (glycelophosphatidiylcholine) cannot be powderized by crystallization (in paragraph [0025]) or by lyophilization (in paragraph [0026]). Therefore, the technical problem to be solved by the invention of JP '882 is to powderize a water-soluble phospholipid, which cannot be easily powderized. In stark contrast, the presently claimed invention, as recited in amended claim 1 above, relates to a process for preparing a β-lactam compound, which comprises a dehydration step of a reaction solution obtained by reacting a compound of Formula (2) with a 4-halogenomethyldioxolenone compound of Formula (3).

The problem to be solved by the present invention is to produce a β-lactam compound at high yield by preventing degradation of the product obtained by the reaction of a compound of Formula (2) with a 4-halogenomethyldioxolenone compound of Formula (3). The above amended claim 1 refers to a reaction of a compound of Formula (2) with a 4-halogenomethyldioxolenone compound of Formula (3), and the applicants submit that this is a significant step which would characterize a purely method claim.

When comparing the presently claimed method, as recited in amended claim 1, with that disclosed in JP '882, it is apparent that the inventions have in common a dehydration step carried out by azeotropic distillation. However, as discussed above, the problems to be solved by the two inventions are clearly different. Namely, the present invention provides a process for preparing a β-lactam compound at high yield, while the method of JP '882 provides for powderizing a water-soluble phospholipid.

With respect to the combination of Iwata et al. with JP '882, the applicants point out that Iwata et al. does not include any description or suggestion regarding a

problem of a dehydrating method. Further, there is no description or suggestion regarding a relationship between an improved yield of the β-lactam compound and a dehydrating method.

Accordingly, the applicants submit that a person of ordinary skill in the art would have no suggestion or motivation to combine the dehydration method of JP '882 with the preparation method of Iwata et al. to result in the presently claimed invention. The applicants assert that the combination of JP '882 and Iwata et al. is not tenable and should be withdrawn.

Even if a person of ordinary skill in the art were to consider the combined teachings of JP '882 and Iwata et al., such combined teachings would not make the presently claimed invention to be obvious for the several reasons discussed above and as follows.

In Example 4 of Iwata et al., the yield of the resulting β-lactam compound is about 33%. Compared with this, the yield of Example 1 of the subject application is 85.1%, which represents a significant improvement. Therefore, the presently claimed invention has the significant effect of providing new and unexpected results for improving the yield of the resulting β-lactam compound. Moreover, a person skilled in the art could not conceive of this effect only by referring to the disclosures of JP '882 and Iwata et al.

Accordingly, the applicants submit that the presently claimed invention is no where disclosed, suggested or made obvious by the combined teachings of JP '882 and Iwata et al. The presently claimed invention is fully allowable under Section 103(a) in view of the cited art.

In response to the Examiner's request for an English translation of JP '882, as mentioned above, the English translation is attached to this Amendment along with PTO Form 1449, listing same.

In view of the above and the attached documents, it is believed that this application is in condition for allowance and a Notice to that effect is respectfully requested.

Respectfully submitted,

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